

A Gamma-Ray Burst Bibliography, 1973-1999

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Abstract. On the average, one new publication on cosmic gamma-ray bursts enters the literature every day. The total number now exceeds 4100. I present here a complete bibliography which can be made available electronically to interested parties.

I INTRODUCTION

I have been tracking the gamma-ray burst literature for about the past twenty-one years, keeping the authors, titles, references, and key subject words in a machine-readable form. The present version updates previous ones reported in 1994, 1996, and 1998 [1–3]. In its current form, this information is in a Microsoft Word 97 “doc” format. My purpose in doing this was first, to be able to retrieve rapidly any articles on a given topic, and second, to be able to cut and paste references into manuscripts in preparation. The following journals have been scanned on a more or less regular basis starting with the 1973 issues:

Advances in Physics*
Annals of Physics*
Astronomical Journal*
Astronomische Nachrichten*
Astronomy and Astrophysics (letters, main journal, and supplement series)*
Astronomy and Astrophysics Review*
Astronomy Letters* (formerly Soviet Astronomy Letters)
Astronomy Reports*(formerly Soviet Astronomy)
Astrophysical Journal (letters, main journal, and supplements)*
Astrophysical Letters and Communications
Astrophysics and Space Science*
ESA Bulletin*
ESA Journal*
IEEE Transactions on Nuclear Science*

Journal of Astrophysics and Astronomy*
 Monthly Notices of the Royal Astronomical Society*
 Nature
 Nuclear Instruments and Methods in Physics Research Section A*
 Observatory*
 Physical Review (main journal A and letters)*
 Proceedings of the Astronomical Society of Australia*
 Publications of the Astronomical Society of Japan*
 Publications of the Astronomical Society of the Pacific*
 Reports on Progress in Physics*
 Science*
 Scientific American
 Sky & Telescope

The asterisks indicate journals which are scanned using the on-line version of Current Contents. In addition, the following journals have been scanned, but in many cases less regularly, particularly in the past:

Annals of Geophysics
 Astrofizika
 Bulletin of the American Astronomical Society
 Bulletin of the American Physical Society
 Chinese Astronomy
 Cosmic Research
 Journal of Atmospheric and Terrestrial Physics
 Journal of the British Interplanetary Society
 Journal of the Royal Astronomical Society of Canada
 Progress in Theoretical Physics
 Solar Physics
 Soviet Physics

The above lists are not exhaustive. For example, where theses, newspaper articles, or internal reports have come to my attention, I have included them, too. To be included, an article had to have something to do with gamma-ray burst theory, observation, or instrumentation, or be closely related to one of these topics (e.g., merging neutron stars, AXPs, SGRs, the Bursting Pulsar), and must have been published in some form. With only a few exceptions, preprints which were never published have not been included.

II ORGANIZATION OF THE BIBLIOGRAPHY

The overall organization is chronological by year. Within a given year, articles published in journals are listed first, in alphabetical order by first author. Then

FIGURE 1. Number of gamma-ray burst publications as a function of year. The cutoff date is mid-1999.

The entries are numbered consecutively, so that paper copies which are kept on file can be retrieved quickly. However, to avoid having to renumber this entire file when a new article is added, numbers are skipped at the end of each year and reserved for later inclusion. The complete author list follows, as it appears in the journal, along with the title, journal, volume number, page number, and year. A line containing key words follows this. These are generally not the same key words as the ones listed in the journal, nor are they taken from the title or any particular list. Rather, they are meant to reflect the true content of the article, and provide

FIGURE 2. The cumulative number of publications by year.

a list of machine-searchable topics. In general, however, key words have not been included for conference proceedings articles.

III A FEW INTERESTING STATISTICS

The number of articles published each year since 1973 is shown in figure 1. Starting with a modest article per month in 1973, it began to exceed one per day in 1994. Several milestones are indicated as the probable causes of sudden increases in the publication rate. The apparent decreases in the rates in 1995 and 1997 are in fact due to a 2 year periodicity in the publications caused by the influx of a large

number of articles from the Huntsville Workshop proceedings. In keeping with this publication rate, the bibliography is updated on an approximately daily basis. Note that there are still about as many papers published as there are gamma-ray bursts. The cumulative total is shown in figure 2.

The sheer volume of the literature has necessitated the development of a program which can search for and extract particular articles. I have written such a program in Microsoft Word Basic (a variant of the BASIC programming language). It allows one to extract all articles between two dates whose entries contain a particular key phrase and write it to a separate file.

IV AVAILABILITY

The IPN web site ssl.berkeley.edu/ipn3/index.html contains a version of this bibliography. More up-to-date versions in plain ASCII, “doc”, and “rich text” (rtf) formats can be made available to interested parties as time permits. Please contact me at

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to request copies, and indicate your preference for the format. I would appreciate it if users would communicate errors and omissions to me.

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REFERENCES

1. Hurley, K., in *Gamma Ray Bursts - Second Workshop*, AIP Conference Proceedings 307, Edited by G. Fishman, J. Brainerd, and K. Hurley, New York: AIP Press, 1994, 726
2. Hurley, K., in *Gamma Ray Bursts 3rd Huntsville Symposium*, AIP Conference Proceedings 384, Edited by C. Kouveliotou, M. Briggs, and G. Fishman, New York: AIP Press, 1996, 985
3. Hurley, K., in *Gamma Ray Bursts - 4th Huntsville Symposium*, AIP Conference Proceedings 428, Edited by C. Meegan, R. Preece, and T. Koshut, New York: AIP Press 1998, 87